Envi™

wall-mounted **HEATER**

OWNERS MANUAL

MODELS COVERED BY THIS MANUAL

475 Watt - 120 Volt Models:

HH1012T	(Plug-In with Thermostat)
HH1012N	(Plug-In No Thermostat)
HW1012T	(Hardwired with Thermostat)
HW1012N	(Hardwired No Thermostat)

475 Watt - 220 Volt Models:

HH1022T	(Plug-In with Thermostat)
HH1022N	(Plug-In No Thermostat)
HW1022T	(Hardwired with Thermostat)
HW1022N	(Hardwired No Thermostat)

475 Watt - 230 Volt Models:

HH1023T	(Plug-In with Thermostat)
HH1023N	(Plug-In No Thermostat)
HW1023T	(Hardwired with Thermostat)
HW1023N	(Hardwired No Thermostat)

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THANK YOU FOR CHOOSING THE ENVI HEATER

Please take a few moments to thoroughly read the instructions and familiarize yourself with all the operational aspects, installation and care of your new Envi Heater. For your own records, please attach a copy of your sales receipt to this manual. Also, write the store name/location, date purchased, and serial number in the space provided on the warranty page.

MISSING PARTS? HAVE QUESTIONS OR NEED HELP?

(PLEASE DO NOT RETURN TO RETAIL STORE BEFORE YOU CALL THE ENVI HELP DESK)

We are here to help you with any questions you might have. Before you call for help though, please read this manual as it contains instructions to help you to install, operate and maintain your heater properly. If you receive a damaged heater - please immediately contact the dealer that sold you your Envi heater. If you still need help please call the Envi Help desk in the USA/Canada Toll Free @ (800) 807-0107 or if calling from outside the USA call +1 (281) 516-1577.

FEATURES & BENEFITS

- Made in the USA to ISO 9001 Quality Certification.
- 3 year Warranty.
- NEW! Adjustable Temperature controlling with simple operation.
- NEW! Wall-Sens™ Technology, safety cut off feature.
- NEW! Convenient cordset storage inside the heater.
- NEW! Now available in hardwired models.
- Economical - high efficiency technology (4 cents per hour*) *(*based on US National Average)*
- Turn down the central heat and use envi heaters where needed.
- Eliminates hot and cold spots where central heat is ineffective.
- Ultra Safe - cool to the touch (90°F/32°C) can leave on unattended 24/7.
- Healthy - won't blow dust and allergens around or dry out the air.
- Sleep Friendly - fanless technology...silent operation.
- Auto-dimming of power light for dark bedrooms.
- Easy Installation – no drill required for mounting to wall.
- Slim - space saving design, only 2in (5cm) thin.
- Long life - No moving parts, crack resistance surfaces.
- Environmentally friendly - low power consumption.

IMPORTANT INSTRUCTIONS

THIS HEATER IS EQUIPPED WITH AN ADVANCED SAFETY FEATURE THAT PREVENTS IT FROM BEING TURNED ON UNLESS IT IS MOUNTED ON THE WALL WITH THE SUPPLIED WALL ANCHOR CLIPS.

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Read all instructions before installing or using this heater.
2. Extreme caution is necessary when any heater is used by or near children or invalids, or when the heater is left operating and unattended.
3. Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.
4. For plug-in heaters, to disconnect, push power button to turn heater OFF (the power indicator light will turn off), then remove plug from outlet. Pull firmly on the plug, do not unplug by pulling on the cord.
5. Connect to properly grounded outlets only.
6. For hardwired heaters, to disconnect, turn controls to off, and turn off power to heater circuit at main disconnect panel (or operate internal disconnect switch if provided).
7. Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.
8. To prevent a possible fire, do not block air intakes or exhaust in any manner.
9. A heater has hot or arcing parts inside. Do not use in areas where gasoline, paint, explosive and/or flammable liquids are used or stored. Keep unit away from heated surfaces and open flames.
10. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons
11. Use only for the intended household or office uses as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons. The use of non-recommended attachments sold by unauthorized dealers may cause hazards.
12. Do not use outdoors.
13. This heater is intended for use as a WALL MOUNTED heater only. Failure to properly secure the heater to a flat, level and vertical wall may result in heater malfunction and/or property damage.
14. This heater will not operate (power will not be supplied) unless it is attached to a wall using the supplied wall mounting clips.
15. DO NOT attempt to repair or replace any electrical or mechanical functions on this unit. Doing so will void your warranty. The inside of the unit contains no user serviceable parts. Qualified personnel should perform all servicing only.

SAVE THESE INSTRUCTIONS

INSTALLATION INSTRUCTIONS

WHAT IS IN THE BOX

- 475 Watt Envi Wall Mounted Heater
- Owners Manual
- 2 x Mounting Clips
- 3 x Hollow Wall Anchor / 3 x #8 Mounting Screws
- Grommet - to protect Knockout hole edges (supplied with hardwired models only)
- Wall Anchor Marking Template (The template holes are marked on the outer edge of the packaging insert frame (Fig. 1) Note: the supplied mounting kit is for installation into drywall / sheetrock only)

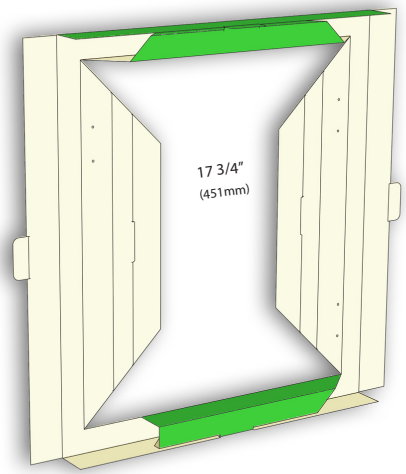
WALL MOUNTING

Remove the heater, mounting kit, and packaging insert frame from the box. Keep the packaging materials for future use.

1. Unwrap and flatten the sides of the packaging insert frame and stand the insert template on the floor. The sides of the insert template have pre-punched holes pre-set to give a heater mounting height of 6" or 8" (15 or 20cm) from the bottom of the heater to the floor. Choose either mounting height, and mark three hole locations on the wall (see Fig. 1).

   The top two hole locations are for the mounting clips and the bottom location is for a third mounting screw hidden inside the bottom access door as described in step 5 below.

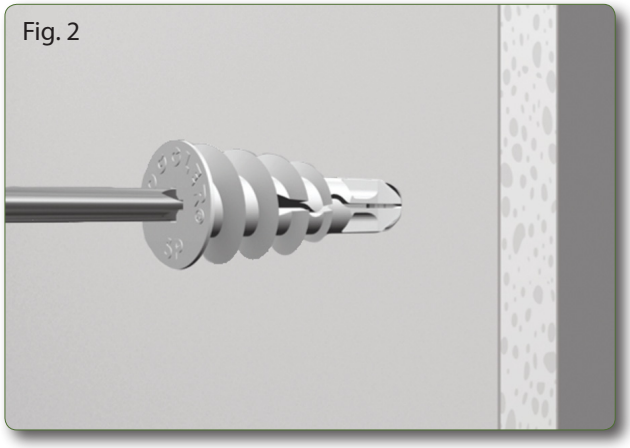
Fig. 1



MOUNTING TIP - Another way to mark the location for the bottom mounting screw is to first hang the heater on the top mounting clips and then mark the bottom mounting hole using the heater itself as a template. This is a more reliable method but is also more complicated and time consuming.

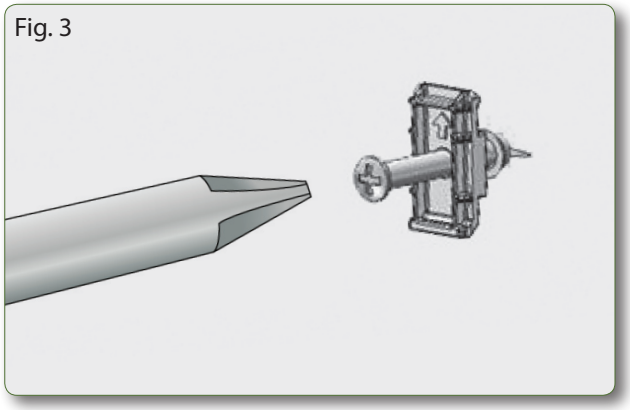
2. Screw the anchors into wall at the three marked locations using a screw driver. (Fig. 2). If a stud is in the way, do not use the wall anchor supplied, just screw directly into the stud. The anchor supplied is designed for drywall applications only. For masonry walls, please use appropriate masonry wall anchors (not supplied).

Fig. 2



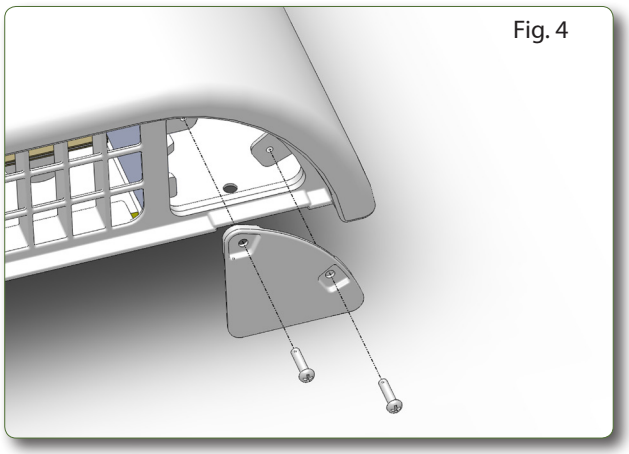
3. Screw the two mounting clips (with arrow pointing upward) into the top two anchor locations and secure firmly to the wall anchors using the provided screws. (see Fig. 3). DO NOT overtighten. There should be a gap behind the mounting clip to hang the heater on.

Fig. 3



4. Remove the bottom access door (to gain access to the bottom mounting hole (Fig. 4).

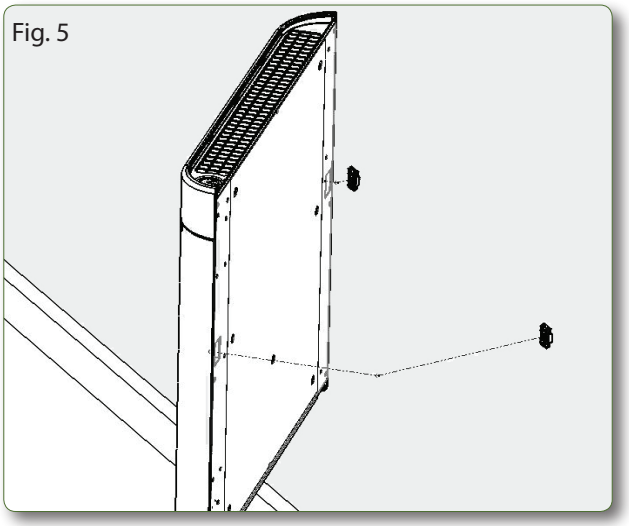
Fig. 4



MOUNTING INSTRUCTIONS (CONT)

5. Install heater on mounting clips making sure to press down firmly on the heater to ensure secure fit. You will hear it "snap" into place. (Fig. 5)

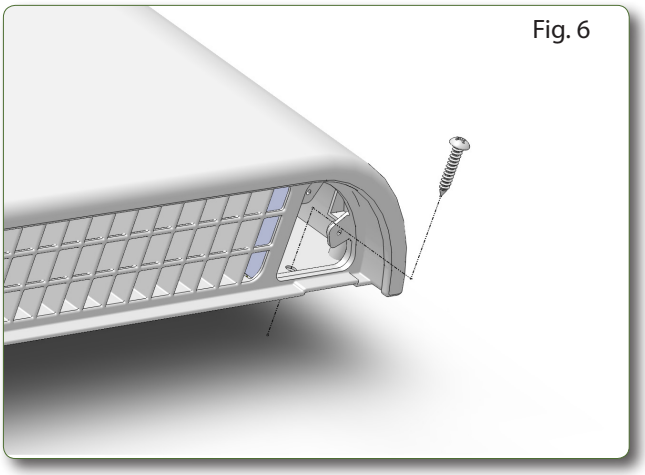
Fig. 5



6. Install the third screw inside the bottom access door area (Fig. 6). Replace the door. Please note: for clarity the cordset is not shown exiting the heater.

For additional information visit www.eheat.com.

Fig. 6

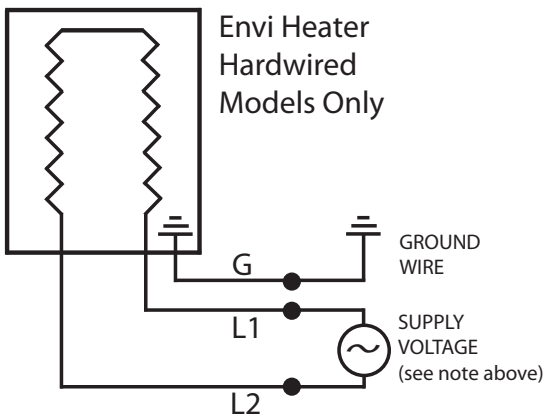


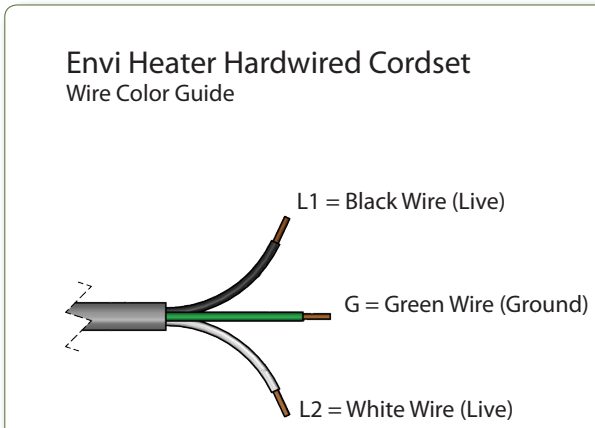
HARDWIRING INSTRUCTIONS

The Envi Heater is available in some regions as a hardwired model: HW1012T / HW1022T / HW1023T (with built in thermostat) and HW1012N / HW1022N / HW1023N (with no built in thermostat, instead a cover plate is in its place)

The Envi Heater can be hardwired direct to a mains supply, branch circuit or it can be hardwired to a line voltage external thermostat of the same voltage as the heater (eg. 120v) or to an external switch or timer. Consult the instructions for each of these control devices for specific wiring instructions. The Envi Heater can also be wired as multiple heaters on the same circuit or controller. For these Multi-Heater Hardwiring instructions please consult the installation page of the website www.eheat.com. The Envi Heater can also be hardwired to a 24volt thermostat using a 24v relay. Please consult a certified electrician and ensure that all electrical work is done in accordance with applicable electrical and building codes.
CAUTION: To prevent short circuits and electrical shocks turn the power off at the main electrical panel before attempting the hardwiring installation or any repairs. If the internal power cable (cordset) is damaged it must be replaced by the manufacturer.
NOTE: This hardwired heater must be connected to the correct voltage circuit according to its model designation, ie. (HW1012 = 120volts, HW1022 = 220volts and HW1023 = 230volts). Disconnect the power supply before making wiring connections to prevent electrical shock and equipment damage.

WIRING SCHEMATIC
NOTE: The following wiring schematic is for a single Envi Heater installation to the applicable ac mains supply circuit and assumes that the there are no external controls being wired into the unit. For wiring of external controls (thermostat/switches or timers) please consult the website www.eheat.com for examples of external control wiring instructions.

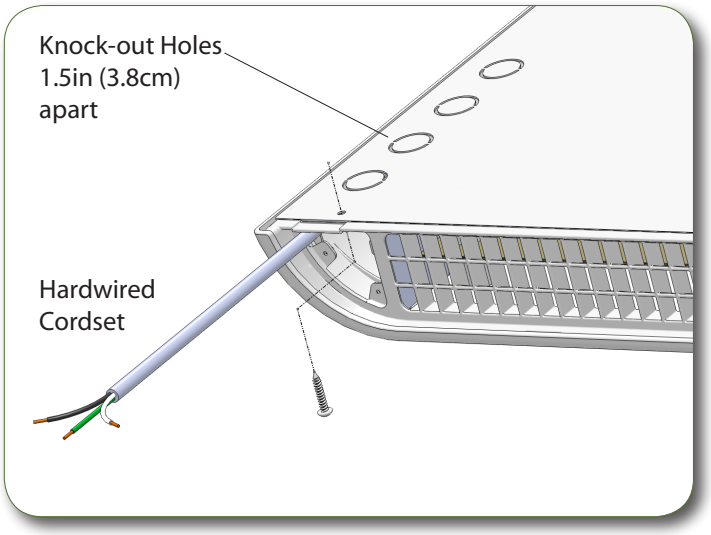




HARDWIRING INSTRUCTIONS (CONT.)

STEP 1

Determine the best wall mounting location of the Envi Heater in a room. If the proper electrical wiring and wall box already exists at a suitable height on the wall, then choose a suitable knock-out hole on the back of the heater (4 holes to choose from) and position the heater on the wall so that the knockout hole lines up with the electrical wall box.



If new electrical wiring and a wall box is to be installed, then it is best to mount the heater first and then determine the corresponding location on the wall for the new electrical wiring wall box. When installing a new wall box, ensure it is at a proper location on the wall to allow the heater to remain at 6" to 8" (15 to 20cm) or so above the finished floor level.

Turn the power OFF at the main electrical panel to the heater circuit. Run the electrical wiring and secure it properly to the electrical box per applicable electrical and building codes. (NOTE: Although the Envi Heater has a low amperage draw (eg. 4amps@120v), the electrical code requires a minimum supply wire gauge to be used, so make sure you check first.)

Knock-out Hole
(Twist to remove)

STEP 2

Mount the Envi Heater using the two mounting clips per the "Wall Mounting Instructions" (see page 2) contained herein to ensure that the heater is at the proper location on the wall and that the knockout hole is aligned with the supply wiring.

STEP 3

Remove the Envi heater from the wall to continue with the hardwiring steps. If not already done at Step 1, remove a knock out hole (a screw driver can be used), on the back of the heater, and install the supplied protection grommet into the knockout hole. Remove the bottom access door and pull the supply wiring into the Envi Heater and out through the bottom access door. Pull the Envi cordset wiring through bottom access door opening, and using wire nuts connect the heater wires L1 (live) , L2 (neutral) and G (ground) to the corresponding supply wires per the wiring schematic above. Push the connected wiring/nuts inside the opening and re-attach the bottom access door.

STEP 4

Re-mount the Envi Heater to the wall, ensuring all three mounting screws are used. Ensure that any wiring is pushed inside the wall electrical box and is not trapped between the Envi Heater and the wall.

STEP 5

Turn the power ON at the main electrical panel to the heater circuit. Check that there are no obvious problems with the hardwiring to the heater (such as crackling noises, sparks or smoke) and if everything is okay, turn on the power to the heater by pressing the on/off button. If the wiring has been performed correctly, then the power indicator light will glow red.

OPERATING INSTRUCTIONS

HOW IT WORKS

The Envi Heater is designed with innovative "Stack Convection Technology" that effectively heats a room with minimal energy. The Envi's inner chamber simulates "stacks" of varying height, which boost airflow through the heater to achieve maximum efficiency. The end result is enhanced airflow at safe air temperature, all without the use of a fan. The Envi heater will provide consistent, comfortable, silent heat without drying out the air or leaving cold spots in the room.

OVERHEAT SAFETY FEATURE

This heater is equipped with an overheat safety feature. When the heaters internal components reach a certain temperature that could cause overheating and a possible fire, the heater will automatically shut off. To reset the heater, unplug the heater power cord from the electrical outlet for 10 minutes. After 10 minutes, plug the heater into the electrical outlet and turn on using the heater's on/off switch located on the front of the unit.

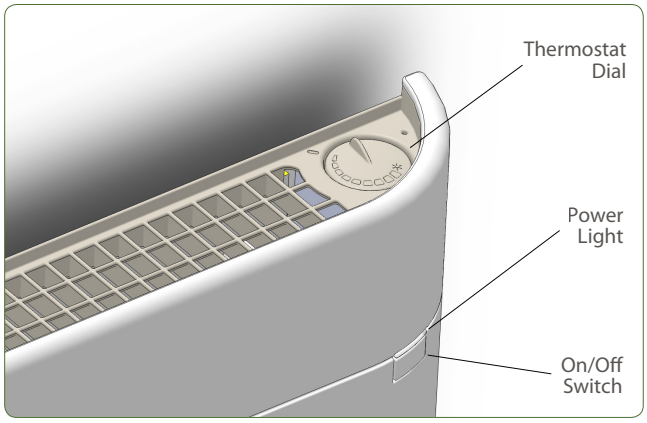
WALL-SENS™ SAFETY FEATURE

In addition to the overheat safety cut-off, the Envi Heater is now equipped with an additional layer of safety to give you greater peace of mind. Wall-Sens™ technology means that in the event that the Envi heater is ever removed from the wall, power will be immediately cut to the heater. This of course means that the heater will not work if it is simply removed from its packaging and plugged into a wall outlet. It must be mounted properly (safely) and then plugged in (or hardwired) in order for it to be begin to heat.

GROUNDING

Plug-in models of the envi heater are for use on standard electrical circuits (eg. 120v for USA/Canada). The cord has a three-blade grounding plug. An adapter can be obtained at most hardware or electrical stores for connecting three-blade grounding type plugs to two-slot receptacles. The grounding lug extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box. The adapter should not be used if a three-slot grounded receptacle is available.
DO NOT DEFEAT THE SAFETY PURPOSE OF THE GROUNDED PLUG.

OPERATING INSTRUCTIONS



1. Install the heater on a firm, level wall and plug the power cord into a grounded power outlet (or hardwire it if applicable). The heater will only operate when it is properly attached to the mounting clips. Be sure to mount in upright position with the thermostat knob on the top of the heater.
2. Once the heater is connected, press the front on/off power switch and the POWER INDICATION LIGHT will glow red. (Fig. 5)
3. The Envi Heater is equipped with a built-in thermostat which is adjusted with a dial at the top of the heater. Adjust the room temperature by turning the THERMOSTAT DIAL clockwise to increase the room temperature. If the area becomes too warm, rotate the THERMOSTAT DIAL counter-clockwise until you reach a point where the temperature is more comfortable. (Fig. 5)
4. Once you have chosen the desired setting, the thermostat will maintain a constant temperature. NOTE: Models with no thermostat have no temperature control and will stay on until the heater is powered off.
5. The heater is equipped with an innovative auto dimming feature that dims the power indication light for light sleeper in darkened bedrooms. The heater automatically
detects when the light level in a room drops and then dims the power light.
6. The plug-in cordset of the Envi heater can be stored inside the bottom access door. Determine how much cordset you require to extend out of the heater. Remove the heater from the wall, and remove the bottom access door. Carefully push the excess cordset inside the heater and replace the bottom access door. Re-install the heater to the wall and plug-in the cordset to continue using your heater. For more information please visit the installation web page of www.eheat.com

OPTIMAL OPERATING CONDITIONS

To get the most out of your Envi Heater, please follow these helpful hints:

1. For optimal performance, mount the heater on an interior wall with the bottom of the heater 6" to 8" (15 to 20cm) from the floor. For smaller rooms this can be increased with little detriment, however try to keep the bottom of the heater a maximum of 18" (46cm) from the floor.
2. The 475 Watt Envi heater is designed to heat rooms 130 to 150 ft^2 feet in size (12m^2 to14m^2). This equates to a 10ft x 14ft room size (3 x 4meters). Of course, this will vary depending on a number of factor, including outdoor temperature, room insulation, room draftiness, room objects, etc.
3. For optimal performance in a room, close all windows and doors and for first time use, leave on for 48 - 72 hrs. This will

OPERATING INSTRUCTIONS (CONT.)

allow the room to reach equilibrium temperature and help to confine the heat to the area that needs it most.

4. To save energy and to reduce your heating bills, place the heater in a room or area that needs extra heat instead of raising the thermostat on your central heating system. This heater will function very well as both a sole source of heat or as an additional heating source that can easily maintain the temperature in most rooms and attached bathrooms if the correct number of Envi heaters are installed. There is no need to increase the heat in the entire house when you only need comfort in the room in which you are currently located.
5. We highly recommend that our customers weatherize their home to further reduce their heating bills. Simple tasks such as replacing weather stripping around doors and windows, caulking door and window seams, sealing attics and basements properly, and adding more insulation to your walls and ceiling will drastically reduce home heating costs.

CARE & MAINTENANCE INSTRUCTIONS

CLEANING

1. Unplug the unit and let it cool completely.
2. To remove dust from the Envi heater, use a soft cloth.
3. To remove marks or stains from the heater, the front outer shell can be cleaned with a soft, damp cloth. You may use a mild detergent if necessary. After cleaning, dry the unit with a soft cloth. CAUTION: Do not let liquid enter the heater.
4. Do not use alcohol, acetone based cleaners, gasoline, abrasive powders, furniture polish, or abrasive or rough cloths or brushes to clean the front of the heater. This may cause damage or deterioration to the surface.
5. Do not immerse the heater in water.
6. Wait until the unit is completely dry before using again.

STORAGE

Store the heater in a cool, dry location when not in use. However, the Envi Heater is a slim, attractive wall mounted heater than can be left mounted on the wall year round.

TROUBLE SHOOTING

If the heater will not operate, please check the following before seeking repair or service:

1. Check that the heater is correctly installed against the wall using the two supplied mounting clips. The Envi Heater will not operate unless it is installed correctly due to the inclusion of a new safety feature called, "Wall-Sens™ Technology"
2. Check if the heater is set to ON by confirming the light on the front of the panel is lit. If not, press the on/off power switch.
3. Check if the power cord is plugged into an electrical outlet, if not, plug it in.
4. If the heater has been hardwired, consult an electrician to check that all connections have been made correctly.
5. Check if electricity to the circuit is working. This can be found in your breaker box, check to make sure the breaker is in the "on" position.

SPECIFICATIONS

PRODUCT SPECIFICATIONS & USE

Power Rating:	475 Watts (All Models)
Volt & Amp Rating:	HH/HW1012 Models = **3.95 Amps@120volts** HH/HW1022 Models = **2.16 Amps@220volts** HH/HW1023 Models = **2.06 Amps@230volts**
Unit Size:	19.3in W x 2.2in D x 22.2in H (49.0cm W x 5.6cm D x 56.4cm H)
Net Weight:	10 lbs (4.5 kg)
Packaged Wt:	12 lbs (5.5 kg)
Color:	"Luxury White" (Other colors may be available - check with Manufacturer for availability)
Safety Listings:	Intertek ETL Listing # 3189101 conforming to: Underwriters Laboratory - "UL 2021 Fixed and Location-Dedicated Electric Room Heater" Canadian Standards Association for "Electric Air-Heaters – CSA C22.2 No. 46-M1988"
Commercial Use:	The Envi is a fixed wall heater (not portable) and operates with low surface temperatures. It is considered suitable for commercial use in Elderly Care, Childcare, corporate and government facilities.

WARRANTY

Three Year Limited Warranty

1. Conservetec International warrants the accompanying Envi Heater to be free of defects in material and workmanship for the applications specified in its operation instructions for a period of THREE (3) years from the date of original purchase in the United States. If the unit exhibits a defect in normal use, Conservetec International will, at its option, either repair or replace it, free of charge within a reasonable time after the unit is returned during the warranty period.

2. As a condition to any warranty service obligation, the consumer must present a copy of the original purchase invoice.

3. THESE WARRANTIES DO NOT APPLY FOR:
   - Damage, accidental or otherwise, to the unit while in the possession of a consumer not caused by a defect in material or workmanship.
   - Damage caused by improper installation or connection to incorrect supply voltage.
   - Damage caused by consumer misuse, tampering, or failure to follow the care and special handling provisions in the instructions.
   - Damage to the finish of the case, or other appearance parts caused by wear.
   - Damage caused by repairs or alterations of the unit by anyone other than those authorized by Conservetec International.
   - Freight and Insurance cost for the warranty service.

4. ALL WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANT ABILITY ARE LIMITED TO A THREE-YEAR DURATION OF THIS EXPRESS LIMITED WARRANTY. CONSERVETEC INTERNATIONAL DISCLAIMS ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES AND IN NO EVENT SHALL CONSERVETEC INTERNATIONAL'S LIABILITY EXCEED THE RETAIL VALUE OF THE UNIT FOR BREACH OF ANY WRITTEN OR IMPLIED WARRANTY WITH RESPECT TO THIS UNIT.

5. Note: This warranty does not renew or extend with a replacement product. All warranties are from the date of the original product purchase.

6. This warranty covers only new products purchased from our authorized dealers or retailers. It does not cover used, salvaged, or refurbished products.

7. As some states do not allow the limitation or exclusion of incidental or consequential damages, or do not allow limitation on implied warranties, the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For Technical Support and Warranty Service,

Write To: Conservetec International
22955 Tomball Parkway, Ste 17,
Tomball, TX 77375 USA
Email: contact@conservetec.com
Call: +1 (281) 516-1577
Online: www.eheat.com or www.envi-heat.com

Registration Details

Store Name: _____

Location: _____

Date Purchased: _____

Serial Number: _____

(Serial # is found on back of unit)